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## A New Chalcidoid Parasite of a Ceratopogonid Midge (Hymenoptera, Encyrtidae)

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The chalcidoid family Encyrtidae contains very few parasites of Diptera. The species of *Syrphophagus* Ashmead, *Syrphidencyrtus* De Santis, *Bothriothorax* Ratzeburg, and *Echthrobaccha* Perkins attack syrphid fly larvae; *Agromyzophagus* Gahan parasitizes *Leucopis* larvae; *Pseudencyrtus* Ashmead and *Superprionomitus* Mercet emerge from cecidomyiids; *Exoristobia* Ashmead and *Tachinacphagus* Ashmead attack muscoids. In addition, *Coccidoctonus trinidadensis* Crawford has been reared from a cecidomyiid predator of a mealybug, although this encyrtid normally is a parasite of the pseudococcid itself. *Paracnasomyia orra* Girault was said by Girault (1915) to have emerged from cecidomyiid galls, but another species of this genus, *P. liszti* Girault, is a well known secondary parasite of scale insects (Summerville, 1934).

*Meromyzobia maculipennis* (Ashmead) has long been reported in the literature to be a parasite of chloropid flies, but that is a mistake. The specimens in the U. S. National Museum collection that are the basis for this record were associated with orthopterous eggs rather than with chloropid puparia.

The foregoing meager list includes all the records of encyrtid parasites of dipterous hosts known to me. The encyrtid described in this paper also has unusual host relationships be-

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cause it parasitizes another dipteran, a ceratopogonid midge. The larva of the host, *Forcipomyia simulata* Walley, lives under bark of dead trees. The encyrtid was observed by its collector to oviposit in the third instar larva of the *Forcipomyia*, and the adult encyrtid emerged from the pupa of the host. More complete life history data on this encyrtid and its host will be published elsewhere, but I am describing the encyrtid here to make its name available.

### **Forcipestricis, new genus**

This genus is most closely related to *Tyndarichus* Howard in that the submarginal vein of the forewing is broadened at the apex, the postmarginal vein is as long as the marginal, all the funicular segments of the antenna are broader than long, with the 4 basal ones greatly reduced in length, and the thoracic notum bears relatively dense, short, recumbent bristles. The two genera may be separated by the fact that the basal 4 funiculars in *Forcipestricis* are so greatly reduced as to resemble annelli, while they are still clearly segments rather than annelli in *Tyndarichus*; also the antennal scape is greatly broadened in *Tyndarichus*, but it is only slightly so in *Forcipestricis*. The eyes are bare in *Tyndarichus*, but are hairy in *Forcipestricis*. This genus also is related to *Exoristobia* Ashmead in that both are parasites of Diptera, the thoracic notum is clothed with short, recumbent bristles, and the antennae are somewhat alike in the two; the frontoververtex in *Exoristobia* is, however, punctate, while it is smooth in *Forcipestricis*, and the submarginal vein is not enlarged apically in *Exoristobia*.

DESCRIPTION. A member of the tribe Bothriothoracini, as defined by Kerrich (1967). Head in anterior aspect subtriangular in form; mandible with 3 teeth, median one larger and longer than others, Fig. 3; maxillary palp with 3 segments, labial with 2, Fig. 4; antennae inserted near clypeus, well below ventral margins of compound eyes; antennal bases far apart, scrobe area not set off from frons by a semicircular carina; antennal scape slightly widened near base, pedicel stout, basal 4 funicular segments sub-annelliform, apical 2 funiculars large, 3-segmented club conspicuously enlarged, Fig. 1. Malar space wide, almost equaling eye height, malar furrow present; eyes hairy; frontoververtex impunctate, width of frontoververtex equal to eye width; ocelli relatively large. Pronotum narrow, normally

almost concealed by posterior margin of head; mesoscutum, axillae, and scutellum with faint surface sculpture and clothed with short, dense, recumbent hair; axillae connate on meson; forewing with submarginal vein enlarged at apex; marginal and postmarginal veins equal in length, both short, stigmal vein slightly longer, Fig. 5; hind tibia slightly broadened and flattened in apical two-thirds. Propodeum short, spiracles touching anterior margin. Gaster compact, broader than thorax; cerci located halfway between base and apex of gaster, ovipositor normally completely enclosed within gaster, its apex not reaching apex of gaster. Male antenna with scape broader than in female, 6 setose, moniliform funiculars, and an unsegmented club, Fig. 2; frontovertex slightly broader than an eye. Costal cell of hindwing more densely setose than in female, gaster slightly shorter than in female.

Type-species. *Forcipestricis gazeaui*, new species.

#### *Forcipestricis gazeaui*, new species

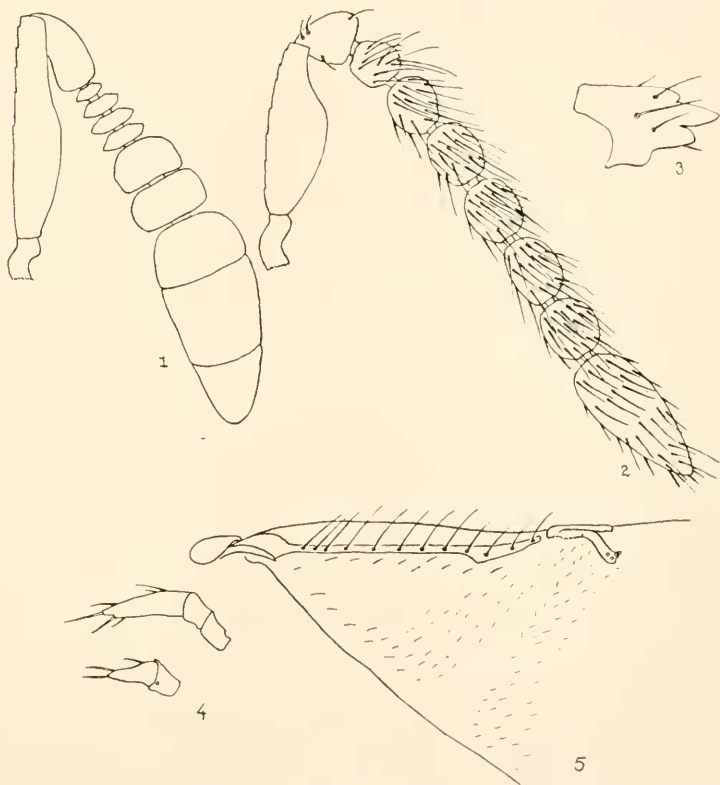
Female. 1.0–1.2 mm. Black, with body hair and bristles dark brown, basal 4 segments of each tarsus tan; wings hyaline, veins dark brown, a small, faint stain behind marginal vein and at base of forewing. Mandible with median tooth long, acute, ventral and dorsal teeth minute, Fig. 3; maxillary palp with 2 basal segments short, semiquadrate, apical segment longer than basal segments combined; labial palp stout, basal segment short, Fig. 4; antennal scape enlarged basad of middle, pedicel as long as 4 basal funiculars combined, apical 2 funiculars enlarged, club greatly enlarged, Fig. 1; width of interantennal projection slightly greater than diameter of an antennal socket; frontovertex smooth, without pits, as broad as an eye; ocelli in a right triangle, ocellocular space  $\frac{1}{2}$  as wide as diameter of lateral ocellus, line from lateral ocellus to occipital margin subequal to diameter of ocellus; occipital margin acute.

Mesoscutum without indications of notaulices; tegula almost round and nearly flat, its surface densely aciculate; mesopleuron with minute, closely set surface aciculations; forewing with basal cell setose in apical half, bare in basal half, narrow speculum extending without interruption from stigmal vein to posterior wing margin; apex of submarginal vein enlarged; marginal and postmarginal veins equal in length, stigmal vein slightly longer than either, Fig. 5; hindwing with costal cell narrow,

bearing one row of bristles; 1 straight and 2 hooked hamuli present.

Propodeum smooth and shining, without hair or bristles; length on meson slightly less than diameter of propodeal spiracle, the latter touching anterior propodeal margin. Gaster smooth and shining, its length equal to that of thorax; scattered bristles borne at apex, gaster otherwise without pubescence; cerci located midway between base and apex of gaster, each cercus bearing 5 bristles, 3 long and 2 short.

Male. 0.9–1.2 mm. Antennal scape stouter than in female, Fig. 2; third to sixth funiculars each as long as pedicel, first and second funiculars slightly shorter, all funiculars bearing long bristles; club  $2\frac{1}{4}$  times as long as pedicel; frontovortex broader



*Forcipestricis gazcaui*. FIG. 1, antenna of female. FIG. 2, antenna of male. FIG. 3, mandible. FIG. 4, maxillary and labial palps. FIG. 5, base of forewing.

than eye, line from lateral ocellus to occipital margin  $\frac{1}{2}$  diameter of ocellus. Costal cell of hindwing with bristles twice as numerous as in female. Gaster equal in length and width to thorax.

Type locality. Springhill Lake, Prince Georges County, Md.

Holotype. U.S.N.M. No. 69802.

Described from 30 females and 28 males, as follows: Type female, allotype male, and 21 female, 20 male paratypes reared October 16–30, 1967, from pupae of *Forcipomyia simulata* Walley, taken from beneath bark of dead trees at Springhill Lake, Prince Georges County, Md., by Lionel Gazeau; 2 female, 2 male paratypes, Nov. 23–29, 1967, from same host and by same collector, Greenbelt, Md.; 4 female, 3 male paratypes, reared from galleries of *Saperda concolor* Lec., June 10–July 21, 1967, Iron Co., Mich., D. Grimble.

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## New Exotic Crane-Flies (Tipulidae: Diptera). Part XVI<sup>1</sup>

CHARLES P. ALEXANDER<sup>2</sup>

The preceding part under this general title was published in ENTOMOLOGICAL NEWS, Vol. 79(2): 35–43. I here am continuing the discussion of the Hexatomine crane-flies that were collected in Assam, India, by Dr. Fernand Schmid, together with a further species taken in northern Thailand by the late Dr. Deed C. Thurman. All types are preserved in my personal collection through the permission of the collectors.

### *Limnophila* Macquart: *Indolimnophila*, NEW SUBGENUS

Antennae short, the proximal three or four flagellar segments enlarged, the lower faces protuberant, without verticils, these

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